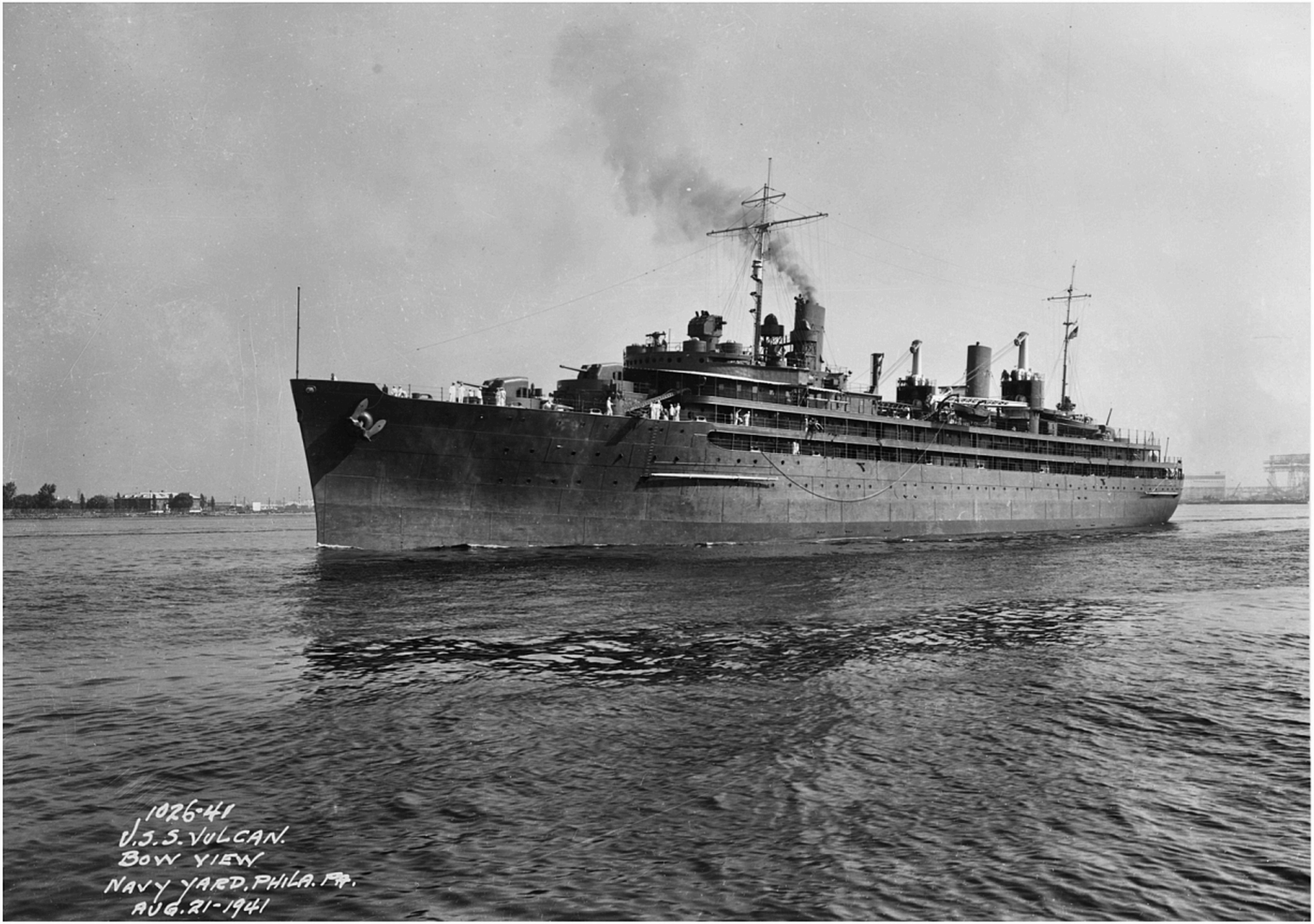
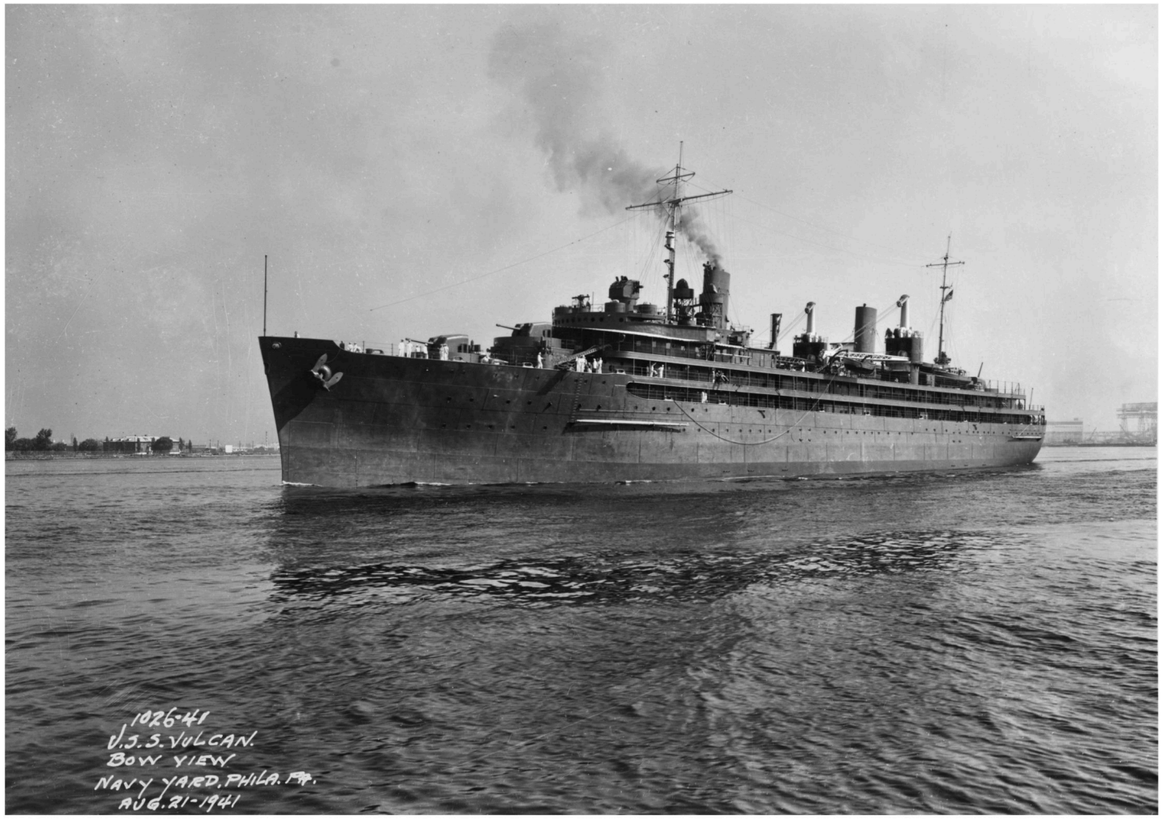

1026-41
U.S.S. VULCAN.
BOW VIEW
NAVY YARD, PHILA. PA.
AUG. 21-1941



00 - cover photo

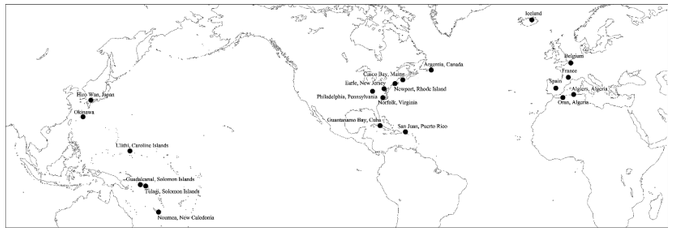
USS Vulcan

Design Type: Auxiliary
Official Number: AR-5

PRINCIPLE CHARACTERISTICS

BUILDER:	NEW YORK SHIPBUILDING CORPORATION
BUILT:	1941
LOA:	529'-4"
BEAM:	73'-4"
DRAFT:	23'-4"
SPEED:	19 KNOTS
PROPULSION:	FOUR BOILERS, TWO STEAM TURBINE ENGINES, TWO PROPELLER SHAFTS, 11,000 SHAFT-HORSEPOWER
DISPLACEMENT:	17,000 TONS (FULL LOAD) 9,430 TONS (LIGHTWEIGHT)
COMPLEMENT:	53 OFFICERS 1,244 ENLISTED
ARMAMENT:	SINGLE 5"/38 DUAL PURPOSE GUN MOUNTS, 4 .50 CAL MACHINE GUNS 4 TWIN 40MM AA GUNS 4 SINGLE 20MM AA GUNS

NAVY REPAIR SHIP *USS VULCAN*, CIRCA 1941.



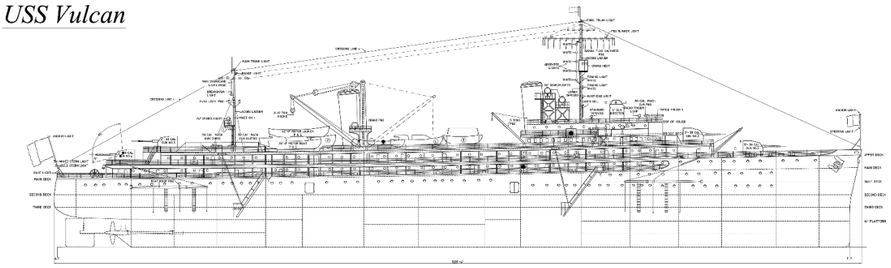
NOTE: PORTS OF CALL

THE VULCAN WAS AN AUXILIARY REPAIR SHIP DEPLOYED TO FORWARD AREAS SUPPORTING THE U.S. NAVY. WHEN NOT ENGAGED IN WAR, THE SHIP PROVIDED ASSISTANCE FROM PORTS CLOSE TO THE OPERATIONAL AREAS OF THE ATLANTIC FLEET. VULCAN PARTICIPATED IN WORLD WAR II, THE OCCUPATION OF JAPAN, THE CUBAN MISSILE CRISIS, AND VARIOUS NATO EXERCISES. THE SHIP IS NOTABLE FOR ITS ROLE AS A TEST PLATFORM FOR THE WOMEN IN NAVY SHIPS (WINS) PROGRAM AND FOR HELPING THE NAVY MAKE THE TRANSITION TOWARDS INTEGRATING WOMEN INTO THE FLEET. VULCAN'S FIFTY YEARS OF SERVICE IS A PROVEN TESTAMENT TO THE NECESSITY OF AUXILIARIES IN THE U.S. NAVY.

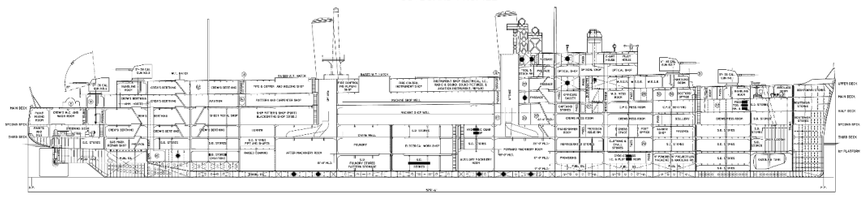
THE PROJECT WAS PREPARED UNDER THE DIRECTION OF TODD CROTEAU (HAER MARITIME PROGRAM COORDINATOR). ASHLEY WALKER (HAER CONTRACT ARCHITECT) GENERATED VESSEL DRAWINGS. DAVID HAAS (HAER CONTRACT PHOTOGRAPHER) CREATED LARGE FORMAT PHOTOGRAPHS. A SPECIAL THANKS TO ERHARD KOEHLER (U.S. MARITIME ADMINISTRATION) WHOSE HELP AND ASSISTANCE GREATLY BENEFITED OUR PROJECT.

USS VULCAN (AR-5) - 1941
NEWPORT NEWS SHIPBUILDING AND DRY DOCK COMPANY
NEWPORT NEWS VICINITY
VIRGINIA
SHEET 1 OF 6
HISTORIC AMERICAN ENGINEERING RECORD VA-178

01 - title sheet



OUTBOARD PROFILE



INBOARD PROFILE

NOTE: DRAWINGS TRACED FROM SCANS OF ORIGINAL DESIGN DRAWINGS (GENERAL ARRANGEMENTS MC1919-S33-I-15)

SCHEDULE OF ROOMS & FEATURES OF VESSEL

NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE
1	SCREENED SPEED LIGHT	7	PASSAGE	13	EXPANSION JOINT	19	RADIO CENTRAL (PORT) BHD. ON CENTER LINE	25	W.R.W.C. AND SHOWERS (PORT) BHD. ON CL.	31	SUPERSTRUCTURE DECK
2	50'-0" MOTOR LAUNCH P&S	8	TOWING ENGINE	14	SLIDING DOOR PASSAGE	20	WARD ROOM PANTRY	26	CONFIDENTIAL LOCKER	32	C.P.O. WASHROOM AND WATER CLOSETS PORT
3	30'-0" WHALE BOAT STARBOARD ONLY	9	HANDLING ROOM	15	RESERVE FEED WATER	21	BLOWER SPACE	27	ARMORY BHD. ON CENTER LINE		
4	35'-0" MOTOR BOAT STARBOARD ONLY	10	HANDLING ROOM & PROJ. STOWAGE	16	POTABLE WATER	22	AIR COOLING COMPRESSOR	28	BH. ON CL. WARRANT OFFICERS S.R. PORT		
5	26FT MOTOR WHALE BOAT PORT & STARBOARD	11	5" POWDER ROOM SMALL ARMS AMM. STBD.	17	REPAIR PARTY LOCKER	23	MAIN ISSUE ROOM (PORT)	29	CLOTHING AND SMALL STORES ISSUE ROOM		
6	SIGNAL FLAG BOARD P&S	12	RADIO TRANSMITTER ROOM	18	GEN. ROOM PORT BHD. ON CENTER LINE	24	MAIN COMMUNICATION STATION (PORT) BHD. ON CL.	30	WARRANT OFFICES S.R.		

USS VULCAN (AR-5) - 1941
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NEWPORT NEWS VICINITY
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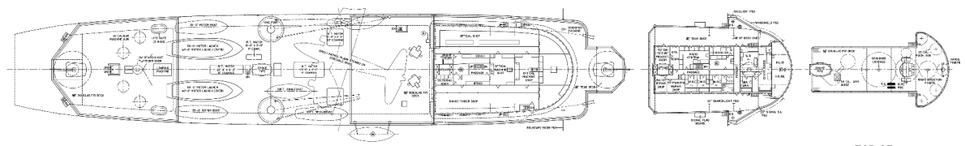
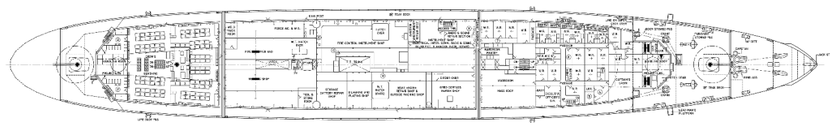
02 - inboard & outboard profile



SUPERSTRUCTURE DECK

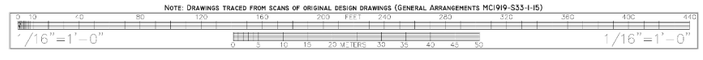
BRIDGE

TOP OF PILOT HOUSE



UPPER DECK

NOTE: DRAWINGS TRACED FROM SCANS OF ORIGINAL DESIGN DRAWINGS (GENERAL ARRANGEMENTS MC1919-S33-I-15)



SCHEDULE OF ROOMS & FEATURES OF VESSEL

NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE
1	5" 38 CALIBER GUN NO.1	5	CAPTAIN'S BATHROOM	9	MACHINIST WORK BENCH	13	5" 38 CALIBER GUN NO.4	17	5" 38 CALIBER GUN NO.2
2	3" R.S. POWDER	6	CONFIDENTIAL LOCKER	10	FIRE CONTROL WORK BENCH	14	5" 38 CALIBER GUN NO.3	18	MAIN COMMUNICATION STATION
3	CAPTAIN'S PANTRY	7	DISHWASHER MACHINE AND STERILIZER	11	RADIO TRANSMITTER ROOM	15	26FT. MOTOR WHALEBOAT STOWED OUTBOARD P&S	19	W.R. W.C. AND SHOWERS
4	CAPTAIN'S S.R.	8	24"x 24" CHUTE TO INCINERATOR	12	CREWS W.C. AND SHOWER	16	ORPHANAGE TOOLS AND STOCK		

USS VULCAN (AR-5) - 1941
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NEWPORT NEWS VICINITY
VIRGINIA
SHEET 3 OF 6
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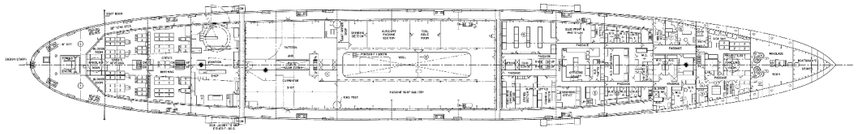
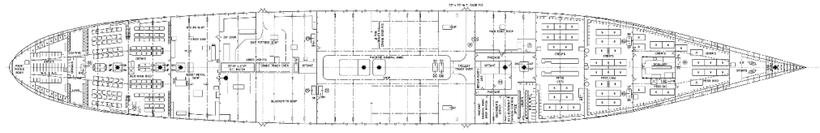
03 - superstructure, bridge & upper deck, top of house

USS Vulcan



MAIN DECK



SECOND DECK

NOTE: DRAWINGS TRACED FROM SCANS OF ORIGINAL DESIGN DRAWINGS (GENERAL ARRANGEMENTS MC1919-S33-I-15)

SCHEDULE OF ROOMS & FEATURES OF VESSEL

NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE
1	ISOLATION WARD	6	SURGICAL DRESSING ROOM	11	CARPENTER TOOL & STORE ROOM	16	36" x 72" A.T.	21	W.T. DOOR 18" x 36'-9" SILL	26	30" x 54" OPENING
2	OPERATING ROOM	7	TREATMENT ROOM	12	KEEP CLR. OF FIXED TOOLS FOR HANDLING PLANE FLOATS TO AVIATION SHOP	17	GARBAGE UNLOADING PLATFORM	22	8'-0" x 10'-0" P.N.T.H.		
3	STERILIZATION ROOM	8	CAPTAIN AND NAVIGATORS OFFICE	13	H.T. HATCH 6'-0" x 6'-0"	18	AIR COOLING COMPRESSOR	23	DOOR WITH 4'-0" BOLTED FRAME		
4	SCRUB ROOM	9	REPAIR OFFICE DRAWING AND PLAN FILE	14	BOATSWAINS STORES	19	36" x 72" OPENING	24	72" x 72" OPENING		
5	DOCTOR'S OFFICE DISPENSARY	10	3 TON ELEC. TRAVELING CRANE w/ CAD CONTROL	15	36" x 66" OPENING	20	GENERAL WORKSHOP (SHIPS) TESTING LAB AND BURNER CLEANING SHOP	25	MASTER AT ARMS S.R.		

USS VULCAN (AR-5) - 1941
NEWPORT NEWS SHIPBUILDING & DRYDOCK
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VIRGINIA
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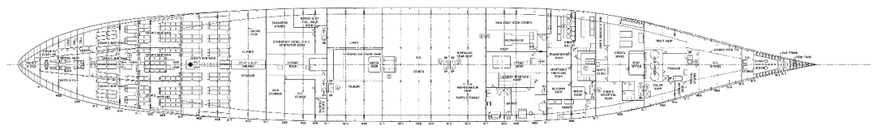
HAER VA-129

RECREATED BY ADAM T. WALKER 2019
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

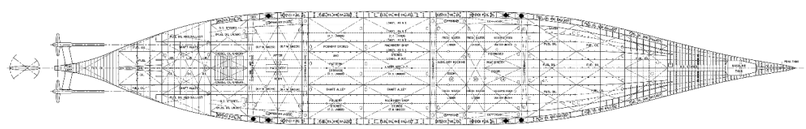
04 - main & second deck

USS Vulcan

HALF DECK



THIRD DECK



HOLD

NOTE: DRAWINGS TRACED FROM SCANS OF ORIGINAL DESIGN DRAWINGS (GENERAL ARRANGEMENTS MC1919-S33-I-15)

SCHEDULE OF ROOMS & FEATURES OF VESSEL

NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE
1	MESS ATTENDANTS W.R. & W.C.	5	7'-6" x 8'-0" F.N.T.H.	9	36" x 30" HATCH	13	RESERVE FEED WATER UNDER
2	30" x 84" OPENING	6	24" x 24" CHUTE FROM SUPER DECK	10	OVERFLOW TANK	14	F.O. OVERFLOW
3	72" x 72" HATCH	7	PROVISION ISSUE ROOM	11	SETTLING TANK		
4	36" x 72" OPENING	8	80 GALLON STEAM JACKETED ICE TUBS	12	POTABLE WATER UNDER		

USS VULCAN (AR-5) - 1941
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HISTORIC AMERICAN ENGINEERING RECORD
HAER VA-129

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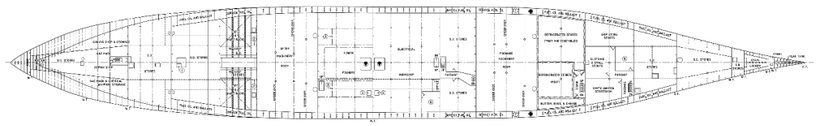
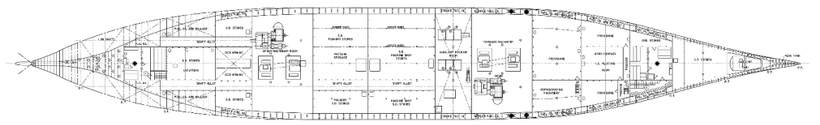
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

05 - half & third deck, hold

USS Vulcan

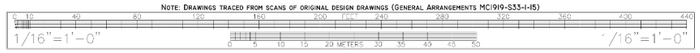


FIRST PLATFORM



SECOND PLATFORM

NOTE: DRAWINGS TRACED FROM SCANS OF ORIGINAL DESIGN DRAWINGS (GENERAL ARRANGEMENTS MC1919-S33-I-15)



SCHEDULE OF ROOMS & FEATURES OF VESSEL

NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE	NO.	NAME/ TITLE
1	30" x 36" HATCH	3	½ TON CRANE OVER	5	36" x 36" F.N.T.H.	7	SETTLING TANK	9	CLOTHING AND SMALL STORES ISSUE ROOM	11	SMALL ARMS MAGAZINE
2	WALKWAY (PORTABLE)	4	7'-0" x 8'-0" F.N.T.H.	6	PARTS STOWAGE AND TOOL ISSUE ROOM	8	FUEL OIL OVERFLOW TANK	10	5" HANDLING ROOM AND PROJECTILE STOWAGE		

USS VULCAN (AR-5) - 1941
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06 - first & second platform